

Data Evaluation and Delivery

Materials data are critical to the rapid and decentralized design and manufacture of communication, transportation and other devices which characterize 21st century life. The goal of the Data and Data Delivery Program is to provide the producers and users of ceramic materials with the means of fulfilling their data requirements in the most efficient ways. This goal is accomplished by providing improved access to materials data, development of methods for transferring materials data across the WWW, providing protocols for data evaluation, and enhancing the functionality of existing collections of evaluated data. Much of this research is based on information technology and includes the development of a materials mark-up language (MatML), and the linkage of digitized crystallographic information with full structure analysis and phase diagrams produced through the NIST/American Ceramic Society Phase Equilibria Program. Other informatics available to the community is contained in the Ceramic WebBook at the Division Website. The Ceramics WebBook provides links to other sources of ceramic data and manufacturer's information, selected evaluated data sets, structural ceramics and high temperature superconductor databases, glossaries and tools for analysis of ceramic materials.